Editor
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MICOM

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THE MICROCOMPUTER CLUB OF MELBOURNE
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This Meeting

APRIL Communications Day.

SPEAKERS: M Wigan (Electronic mail, Conferencing, International networks). P Jetson (MICOM Bulletin Board, CITADEL etc) and others.

USERS TO BRING: Modems, communications programs, systems with them on. (Micom to provide phone line access for live demos of TeleNet , TAB, SOURCE etc.

Coming attractions:

MAY Modula-2 and UCSD Day.
JUNE Forth Day.
JULY Graphics Day. (Planned but not finalised).
AUGUST Film Day. (Planned but not finalised).
SEPTEMBER Knowledge Based Systems/Technology Day.

The Great MICOM Car Rallies

On the 29th April MICOM will be running 3 conjoint car rallies (trials), all members will be welcome to compete in any one of the three courses, either beginner, intermediate, or advanced. The three courses are of increasing time and difficulty and will take between 2 and 4 hours. Cars will be sent off at intervals, with the first cars arriving at the finish in time for lunch and the last in time for dinner, well we hope not, but anyway make sure you bring food and drink for the picnic-BBQ at the end (weather permitting). The rally will be held no matter what the weather is like by the way so don't think it's off just because it happens to rain that day. (Hint: if it does rain, bring an umbrella)

Entry fee will be $3 per vehicle and will be collected at the start. Prizes and trophies will be awarded to place getters in each category.

The rallies will start in Rathdowne St. Carlton at the main entrance to the exhibition buildings at **10 am.** cars are to line up facing south (towards the city) the first to arrive will be first away. I am reliably informed that the rallies will not damage your vehicle (too much) but that large vehicles will be at a slight disadvantage (please leave semis at home). Note you must obey all road laws, points will be deducted for any breaches.

You will only need to bring a Pen, but a Melways, a compass, clip board, dictionary, and note paper will be of help.

If you don't have a car and would like to take part, or if there is anyone looking for a navigator, say so at the next meeting, we will try to match up some teams, since a team must have a minimum of two people. And all you family types, make sure you bring the kids, they'll love it.

For more info, contact David Green on 241-6673.

P.S. I am also reliably informed that a fluent knowledge of sanskrit and swahili are not required.

Meeting times and venues

The Microcomputer Club of Melbourne **(MICOM)** meets at 2 pm on the third Saturday of each month at Burwood State College, in the community resources centre, building E. Meeting dates are:
April 21st, May 19th June 16th

The CP/M Users Group of Melbourne **(CPMUG)** meets at 7.30 pm on the fourth Tuesday of each month at Burwood State College, in the community resources centre, building E. Meeting dates are:
April 24th, May 22nd June 26th

The Peach Users Group **(PUG)** meets at Templestowe Technical College, Cypres Ave Templestowe, at 8pm on the first Friday of each month. Meeting dates are:
May 4th, June 1st, July 6th

The Victorian Big Board Group **(VBBG)** meets at members homes. For more information contact Geoff Kidd at work on 433 2364. Meeting dates are:
May 2nd, June 6th, July 4th

The Otrona Users Group is forming
Meeting dates have not been finalised yet.

MICOM operates a Computerised Bulletin Board System **(CBBS)** for message transfers between MICOM members. The access password for members appears on the mailing label on this newsletter. Limited visitor access is available for non-members. The system operates continuously, and may be accessed via a 300 baud modem on **(03) 762 5088.**

Victorian Big Board Users Group

The Victorian Bigboard Users Group met on the 20th of March at the home of one of its members. About 20 people attended the meeting, which was Chaired by Geoff Kidd. We were asked by MICOM to keep official minutes of the meetings, so we will keep them from now on.

The disk library of the VBBUG is now complete with the exception of volume 4 which does not contain anything of very great interest. CPMUG does not mind lending us their library if we are willing to lend them our library and we are willing to do that.

The Xerox 820 boards (which are Bigboard 1 lookalikes) finally arrived - they were sent by boat instead of a plane.

A sort of questions and answers session was held in which a lot of questions were asked and a few even answered.

We were contacted by user groups in NSW, Qeensland and WA for information of what we were all about.

The group is really growing now and this makes it necessary to look for a regular venue where we can hold our monthly meetings. At the time of the deadline of the newsletter, the venue is not known but will hopefully be available in time for the May meeting (watch CBBS for details).

CP/M Notes - John Quirk RESOURCE

Well here we are again in the programs I use and like section. This month it is a Disassembler program written by Ward Christensen, of modem7 fame, the program is called Resource.

Resource is a very nice disassembler for people who like to see how something was done in machine code but don't have the source to the program. A disadvantage of Resource is that it disassembles into 8080 mnemonics. The output of Resource can be written out to disk and this output can then be reassembled using ASM.COM as supplied with CP/M.

What makes Resource so nice is that when it disassembles it generates labels which can be renamed to suit. It will also generate 'DB' (Defined Byte) and 'DW' (Define Word) which is nice for look up tables and lines of text.

When you're finished your current session or you've just had enough you can save everything to the disk ready to resume at a later date. The files saved are the .SYM which is the symbol table, .ASM file which contains the disassembly and a .CTL file which contains information used by the disassembler internally.

Resource can be found on CP/M-UG Library VOLUME 42.

Packet Radio Group

The Packet Group meets informally at MICOM CP/M Users Group meetings on the fourth Tuesday of each month. It is so informal that as yet we have not elected officers to run the group. Hmm... Anyway, talk to Peter Jetson (VK3-ZMB) about technical matters or. David Furst (VK3-YDF) about organisational details.

At present there are four members who are buying bits in order to get a packet radio network going in Melbourne. As well as the above two there are John Smelstorius (VK3-ZVR) and Ian Clark (VK3-YRR). The number of people at the last meeting of the group was about fifteen.

I hear you asking 'Just what is Packet Radio anyway?'. It is a method of transmitting data, without errors, from one amateur station (Ham Radio) to another across a radio network.

This new technology will be a very natural marriage of two related disciplines and groups of people, Computer hackers and Radio hams. It should be noted at this point that hams who are not also hackers will probably not be interested or able to participate in this, nor will hackers who are not also licensed radio amateurs.

It's all done by packaging the information into 'packets' (a packet is usually one ASCII line of text). A packet consists of three primary parts. The first part is an address. In this case usually the callsign of the station the information is being sent to. The next part is the actual data to be sent. The final part is error checking and correction information.

All the above is done by a smart box called a Terminal Node Controller (TNC) hooked up between your intelligent terminal and your two way radio.

The actual workings happen a little like this: You decide to talk to station VK3-XYZ and ask your TNC to arrange this. Your TNC waits until no one else is using the frequency for a couple of microseconds then sends out a packet to the effect:

'Mr. VK3-XYZ are you free?'. If the other party is indeed free his TNC sends back another packet replying that he is free. Both TNCs then consider themselves connected to one another and will ignore any other packets floating down the ether, but will send addressed packets to each other and respond only to packets from the other. Just to be certain there are no misunderstandings each TNC will always acknowlege that it did in fact hear what the other said. From this you will see that each station only needs the radio channel for the few milliseconds it takes to send a line of ASCII text, and that the channel can be used by many stations effectively simultaneously. Naturally all the TNCs are well mannered enough to understand the social niceties of getting along together and should clashes occur, they will settle their differences amicably.

So that's it, virtual connections. Dare I say it? Packet Radio is the connection you have when you're not having a connection.

Apart from all this whiz-bang stuff, what's so great about Packet Radio, you ask? Well, it gives you data integrity, virtual connections, can route messages, act as a gateway to other systems and gets heaps of information from lots of people across just one radio channel. Pretty neat, huh?

It can be used for 'chatting', interchange of programs, dissemination of information, a gateway onto Amateur Radio Satellites and other packet systems (Amateur and professional), playing games such as Space Empires, access to computers then people may choose to put 'on line' and bulletin boards. The bulletin board could even have a phone link so that it could be talked to by people outside of the radio network.

The whole area is so new that we really don't have much idea of what the full possibilities are.

Our goals are to get a network up and running as soon as possible, followed soon after by a bulletin board service and a digital repeater sometime a little further on.

Complications? Well, two primarily. One: it's going to cost you about $250 for a TNC and $200 for a [illegible] metre FM rig (That's Ham talk). Two: you have to [illegible] a licensed Radio Amateur and getting that licence involves a three hour technical exam and a 30 minute examination of the rules and regulations. You have to get at least 70% and the questions are damned hard.

Just to embarrass Peter I would like to point out that he has the honour of being the only person known to pass the technical exam and flunk the regulations....

A few details: the chosen frequency for the main channel is 147.600. We hope to have this frequency confirmed with the Wireless Institute of Australia soon. The protocol we have settled for is the VADCG protocol from the pioneers of Packet Radio at the Vancouver Amateur Digital Communications Group. Radios used will most likely be ICOM IC22s because of the fast turnaround time from transmit to receive. The baud rate will be 1200 initially.

We would like to extend our warmest thanks to the

Sydney Amateur Digital Communications Group and most particularly to Jim Swetlikoe of that group for all his help and encouragement.

David Furst.

Last month the front of the newsletter, and the calander showed the CPMUG meeting as being on the Thursday of the week before, this was a mistake. My appologies to any who may have been inconvenienced.

Ed.

The MICOM Bulletin Board

The Bulletin Board is possibly one of Micom's longest term projects. It is certainly one of the most important and revolutionary. We have opened up the new horizon of MICROCOMMUNICATIONS. You can ring the bulletin board for language tips, buy and sell, latest news, humour, gossip, all this and more. The possibilities are so enourmous in this field that no one has any real idea of where it will all go.

The bulletin board is a free service to the entire microcomputing and microcommunicating community, provided by MICOM, for the benefit of all.

The Prez. and the committee wish to thank Peter Jetson for his long and continuing efforts on behalf of all. It was his ideas, inspiration and work that have made this all possible.

The following is a complete description of all the commands and functions of the current CBBS, you may find it useful for reference in the future.

COMPUTERIZED BULLETIN BOARD SYSTEM (C.B.B.S.)

PRESS "S" TO STOP OUTPUT, "S" TO START IT AGAIN (NO DATA WILL BE LOST)

CONTROL CHARACTERS ACCEPTED BY THIS SYSTEM:

ASCII CHARS	CTL CHARS	
	DEL/BS	CHARACTER DELETE (_ is underscore)
C	C	CANCEL OUTPUT
	I	TAB (TABS SET EVERY 8)
K	K	FUNCTION ABORT
N	N	START SENDING 5 NULLS
	R	RETYPES INPUT LINE
S	S	SUSPEND OUTPUT
	U	LINE DELETE

If you get stuck, try: Ctl-K then C/R until you bail out back to the main menu.

Whenever we refer to "C/R", we mean your "return" key!!

'FRILLS": CTL-W RETYPES WORD
CTL-L SHOWS WHAT COLUMN YOU ARE IN.

When you are asked a question, answer with Y for yes, or N for no. Are you using a video terminal (as opposed to a printer) When the system is typing, you can use control-S to stop the output to look at it, then again to continue. This will allow you to see what is sent before it scrolls off.

THE PURPOSE OF THIS SYSTEM

--> Entering messages
--> Retrieving message summaries
--> Retrieving messages

It is run by MICOM for message communication between computer hobbyists. Typical message subjects include: 'something for sale', 'need help with something', 'club meeting notice', or just sharing ideas. Feel free to leave a message on any hobbyist computer related subject. Commercial 'ads' ARE permitted, providing they are hobbyist related.

QUICK SUMMARY OF WHAT TO DO YOUR FIRST TIME

1. S - Use the S function to retrieve message summaries (or Q for quick (subject only) summaries)
   * Start with message 25 to 50 less than high # printed when you first signed on.
   * Use control-S to stop/start output.
   * Write down message numbers you want to see.
   * Use control-K to kill the summary, return to menu

2. R - Use R function to retrieve messages of interest.

3. G - Use the G (Good bye) function when you are done.

Remember to use the H (Help) function for details.

NOTE: When you receive the line:
FUNCTION: (B,C,D,E,G.....) (OR ? IF NOT KNOWN)?

--> Please reply ? the first time so you learn of all the functions available.

Press "C" to skip 1 bulletin. Repeat as desired.

Please don't leave phone numbers and passwords to computers unless you are CERTAIN they are for P-U-B-L-I-C use!

--> Messages 1-20 contain information of general interest, and are periodically updated. Type q;1 to see a quick summary, then press K to stop the summary.

--> Use control-I (tab) instead of spacing, in msg input. In general, please don't waste space in msgs, i.e. "....." etc.

CTL CHRS = Help with system control characters.

The control chars DEL/RUBOUT control-R, and control-U are used when keying in a line. Control characters CTL-C, K, N, and S are used when the system is typing something to you.

DEL (sometimes labeled RUBOUT) is used to backspace when typing, erasing the characters you typed. The system echos the characters back to you as it deletes them.

Control-R retypes the input line back to you. Use it when you want to see what the line you are typing looks like, after having used DEL.

Control-W works like control-R, but retypes only the last word entered.

Control-U cancels the entire line being typed, allowing you to start it over.

Control-C cancels what is being sent. Output resumes at the next information typed, or the next question.

Use it when you know what the system is going to say/ask, or otherwise don't want to see more of what is being typed.

Control-K kills the current function. It returns you to the function select menu. It may be typed alone as the first character on a line in input mode. If allowed, it will echo as: ΔK and you must press return to have it take effect. If you get a ΔK when you don't want it, cancel it with a control-u.

Control-N sets a flag telling the computer to send 5 null characters at the beginning of each line.

Control-S suspends output until some other character is typed. se this if you have a video display, and want to see something before it scrolls off the top of the screen.

"y" or "n", CBBS will flip from the default upper-case-only mode, into lower-upper mode. If you enter "Y" or "N", (i.e. upper case) CBBS stays in upper case mode. If you (E)nter a message, CBBS will ask if you can handle lower case (because messages in lower case look nicer). This will only be asked once.

E=Message entry function

The E (Enter) function is used to enter messages into the system. A message is any information to be conveyed to 1 or more people. You may leave messages for a specific person or group, or "ALL". It consists of up to 16 lines, each line up to 60 characters. You may assign a password to be able to erase your own messages. Using the Enter function, you key in your message just as if you were simply typing it at a typewriter. The system will put line numbers at the front of each line (like a BASIC program). After the message has been keyed in, you can edit it, list it, save it, or abort. See help keyword "ESUB" for the enter function subcommands. You can also base your message on a previous one, getting that msg, and editing it. See ESUB.

ESUB=Edit function subcommands.

Once you have keyed in your message (or part of it) here are the subcommands of (E)nter you may use:

(A)bort: discards your message, returns to main function menu.

(C)ontinue input. If room, continues inputting at msg end.

(D)elete a line: You specify the line number. Following lines are moved back to fill up the space.

(E)dit a line: allows a character-string-substitution type edit to be performed on a particular line. (Example: /moem/modem/ to correct a misspelled word.

(G)et previous msg: allows you to fill the edit buffer with the contents of a previous message, then edit it. Particularly useful for updating "for sale" msgs, deleting items sold, changing prices, etc.

(H)elp types a help file allowing you to get details on any of the subcommands

(I)nsert a line: You will be asked for a line number, then to key in a new line, which will be

inserted BEFORE the specified line #.

(L)ist allows listing from a starting line #. The entire message from that line is listed, unless you press K or control-K to skip back to the Enter subcommand menu.

(R)etype allows entirely retyping any line, use it when (E)dit would be too tedious.

S)ave saves your message on disk, and returns to the main function menu.

PASSWORD=Help with protecting messages with password.

When you enter your message, you will be asked if you want to password protect it. If you say no, then anyone can kill it later (but presumably only the person you sent it to will). If you say yes, then you can either

1. enter a 4 character password
2. press return to have the system protect the message.

In case 1, you, anyone knowing your password, or the system operators, will be able to kill your message. In case 2, only the system operators can kill it.

K=Kill function

To kill (erase) a message, you use the "K" function. You'll be prompted for the message number. If the message is found and is killable, it's summary will be typed for verification that you entered the correct number. If it was saved with a password, you will be asked for the password.

S=Summary command
Q=Quick summary command

The (S)ummary function prints 2 lines for each message in the system, from a given starting message number. Use ctl-K to abort the summary listing. The Summary prints:

Message number. Number of lines in message. Date Created. From. To. Subject.

The (Q)uick summary function prints only msg # and subject. You will be asked for the starting message number, (you need not enter leading zero Alternatively, you may enter a number of the form n, where n is number representing 'the last n messages'. For example q;-15 would start the scan from the 15th most recent message. (or, you could type Q, then press return, and when asked for the starting message #, reply with -15). ";" is used separate "anticipated" answers.

SCAN - scanning summaries for content.

When you ask for either summary printout, you must always give a starting message number. However, you may ask that a field in the summary header be scanned for a certain value. For example, any subject containing 'FOR SALE', or any message from 'SYSTEM OPERATORS'. To do so, follow the message number with a comma, the letter for the field to be scanned (D=date, F=from, T=to, S=subject), an equal sign, then the value to be scanned for. Example: 1,T=WARD (or) 1,S=MEETING (or) 20,S=FOR SALE ";" may also be used: q;1,s=cbbs All lower case characters will be converted to upper by CBBS.

R=The retrieve function.

The retrieve ("R") function is used to retrieve a message from the system. You must know the message number, which you can find using the S (summary) or Q (quick summary) function. You will stay in "retrieve mode" until you press return to go back to the function menu.

The GOODBYE function.

Typing G when asked for the function, will get you off the system. You will give you a chance to leave comments about the system, just by keying lines in. (no editing, etc).

N=The Nulls function.

Certain terminals require nulls to be sent to them following a carriage return/line feed, for instance the T.I. Silent 700 series. The 'N' function is used to set the number of nulls, to any value from 0 to 255. However, if you need nulls, you would want to get them from the beginning. While the system is typing, pressing control-N will cause the system to send 5 nulls after each linefeed. Press control-N repeatedly if it doesn't work at first.

BULLETIN=Help with retrieving Bulletin and Welcome messages. B=Bulletin reprint function.

D=The Duplex (Echo) function.

The D (for Duplex) function switches the system between Full Duplex (which echoes what you type) and Half Duplex (which doesn't echo what you type) mode. Some teletypes and other devices print immediately when you press a key, so you don't want the system to echo characters back to you. Use the D function to switch to or from this mode.

P=The prompt (bell) function

Every time the system wants you to type something, it sends you a question mark, then a bell character. The P function may be used to stop the sending of the bell prompt. Using P flip/flops this function (bell on, bell off, etc).

X=The expert mode function

The X function puts you into expert user mode. It shortens all prompts, and deletes some lines such as the headers in the summary print. Use it to save time after you have become familiar with the system.

USE=Help with using system efficiently.

1) Minimize connect time: only 1 phone into system.

2) Use control-C to cancel typing if you know what is being typed or don't want to see more.

3) Use message summary retrieval to see what messages you want to see. For example, if you have seen messages 1-20, ask for summaries starting at message 21.

4) If you plan on leaving a message, have it well thought out to minimize the 'compose' time while you are on the system.

5) Once you learn the questions being asked, answer multiple questions in advance by separating your answers with a semicolon (for example: s;1 or r;23;24;25).

V=Video backspace mode function.

Typing 'V' will change the system backspace function from echoing the deleted character (enclosed in 'slashes') to actually returning a ctrl-h (backspace), a space, and another ctrl-h. This makes editing with a video terminal much cleaner.

TAB=Use of control-I (TAB) characters.

When entering messages, you may now utilize the ctrl-I or tab key. This will allow you to format your messages without adding too much space to our files. The tab key spaces over to the next tab field which is 8 characters wide.

SOFTWARE=What software drives CBBS.

CBBS runs under the popular 8080/Z-80 CP/M operating system. CBBS itself is written in 8080 assembler, and is about a 6,500 line source program. The term "Computerized Bulletin Board System" and it's abbreviation "CBBS" is the name given to this software.

Why does CBBS exist.

CBBS exists thru the generosity of MICOM. We are computer hobbyists interested in sharing our abilities with all of you just for the fun of the information exchange.

SCANNING THE SUMMARIES:

You enter the number at which the summary is to start, then press return. The printout will continue from that number until the end, or until you press control-K to stop the summary print.

If you want to scan the summary file for certain messages based on their subject, who from, who to, or the date, you can. This works for either the regular (s) or quick (q) summaries.

Want to learn how to scan?

Instead of entering just a starting message #, key in the msg #, a comma, one of the following:

F to scan the 'who from' field
T to scan the 'who to' field
S to scan the subject field
D to scan the date field

then an equal sign, then the character string to match. Sounds complicated, but watch this:

1,f=ward start at 1, find messages from ward
200,s=sale start at 200, find messages about 'for sale'

1,d=10/13 scans for first message on 10/13 (note problem scanning for date 10/9 as it might also be 10/09)

As you can see, the character string can match anywhere in the field. It doesn't have to be the first characters. You can save some time by combining your input:

q;1,t=ward or s;1,s=sale or q;1,d=10/13 rather than keying in q or s, then pressing return.

Messages

* A msg contains up to 16 lines of up to 60 characters.
* First key in the lines.
* Press return twice to get to the following:

MESSAGE ENTRY SUBCOMMANDS

(A)bort back to main menu
(C)ontinue inputting where you left off
(D)elete a line
(E)dit a line (string search/substitute)
(G)et a previously entered msg, by #
(H)elp: gives details on each of these options
(L)ist the message
(R)e-enter any line
(S)ave the message

'A=ABORT' function?

The Abort function is used to abort the message entry. Nothing you have done is saved. You will return to the main menu asking which function you want next. If you use abort, the system will confirm your intent to throw your msg away.

'C=CONTINUE INPUT' function?

The CONTINUE INPUT function allows you to continue to input your message where you left off, unless you have already entered the 16 line maximum. You will go back into input mode, prompted by the next open line number.

'E=EDIT' function?

The EDIT function allows you to edit your message, by doing character string substitutions within a particular line. For example, if you have a line with 'moem' in it, but you wanted it to be 'modem', use the E command, give the line number, (if not known, find 44e line number by using the L command) then when it asks, type: /moem/modem/ The first string will be searched for, and if found, will be replaced by the second string. Any printable character may be used instead of the '/', providing it does not appear in either the old or new string. For example, to change "11/13/79" to "12/15/79" type: =11/13=12/15= i.e. use "=" as the delimiter for old and new string.

E keeps asking for the command, so you can perform multiple changes. When the line is right, just press return.

A command of: /// prints the line with no changes.

D and I (line delete and insert) functions?

D deletes a line. You will be asked for the line number. The following lines are all moved back 1, so be careful when de- leting more than 1 line: D;1;D;2 would delete lines 1 and 3 because D;1 deleted 1, and made old lines 2, 3.. into 1, 2... Therefore to delete the first 2 lines, type: D;1;D;1

I inserts a line. You will be asked which line you want the new line inserted BEFORE, and then asked for the new line data.

'L=LIST' function?

The List function allows you to list your message, to 'proof read' it, or to find which line you made a mistake in. You simply type: L;nn and the message will be listed starting at line nn. (or you may type just: L and will be prompted for the starting line number.) In CBBS versions 3.0 or later, you may press K or ctl-K to stop the listing. Control goes back to the enter subfunctions (not to the main menu, as with versions of CBBS before 3.0).

'R=RETYPE' function?

The R function allows you to correct mistakes in your message by totally retyping any line. The system will ask you for the line number to change,

so be sure you know it in advance. Use the L (list) command if you are not sure of the line number.

'G=get msg' function?

If you want to get a previous message instead of keying in a new one, use the G command, and when asked, give the message number to be gotten. After you get it, you can use all of the other commands, to modify this message, then save it back with "S". It will be saved as a new message, the highest one in the system, so be sure to delete the old one you got if that is appropriate.

'S=SAVE' function?

You use the Save function when you are satisfied that your message is correct, and that you want to store it. CBBS will write the message to disk, and update the summary file and number of active messages. When you want the message erased, you sign on the system and use the (K)ill function and the password you assigned (if any).

To get out of message input at any time, just press return twice. You will return to the ENTER sub-function menu, and can then use the (A)bort command to go back to the main menu.

Secretarial Sightings

Creative Computing - February '84. Pinnies fans can get a glimpse of the newest games displayed at the MOA expostion.

MICROSYSTEMS - February '84. CP/M mashers will delight in two articles in this issue. The first is on Resident System Extensions (RSX) for CP/M-Plus and the second is on CP/M Disk Parameter Tables.

BYTE - February '84. Apple's Macintosh is featured on the cover and cored inside. The Art of Benchmarking shows that speed is not everything.

Mitsui Computer Systems - South Melbourne. Sales brochures on the JUKI 6100 18 CPS daisywheel printer and the Mitsui MC 2100 8" dot matrix printer.

D.W.Thorpe, 384 spencer St, Melbourne 3003. Send data on your microcomputer software package to the above address for inclusion in their forthcoming guide to Australian-produced microcomputer software.

HAL Computer Products, 551 Burwood Rd, Hawthorn. Mr Wenzler offers MICOM members the opportunity to purchase IBM PCs and IBM PC compatibles at a competitive price.

Meyertronix - Riverstone NSW. Their Computacontrol Module is a memory mappable device to control the external world by relays. See Electronics Australia February '84 for more details.

Computer Dynasty - Hornsby NSW. They are offering the AMUST 816 Executive personal Computer for $2995 plus $545 sales tax.

Members Messages

Bill Mulder has two 8" Shugart single density drive, in an SME fan cooled 19" rack mount cabinet with power supply for $750.

Also an SME S-100 floppy disk controller board for $150. He can be contacted on 560 1050 AH or 791 6749

BH.

Future Business Systems, Suite 6 105 Hawthorn Rd, Caufield, are looking for contract programmers with specific need for C under XENIX and MBASIC under CP/M 80 or MSDOS. Contact Sol Millin on 523 9211.

Micom Bulk Buys

Cicada 300 baud modems (with cable)	$190
RS232 4-wire cables to suit standard modems	$ 20
Cables made to order	$POA
Lockable Disk storage boxes:	
8" 40 disk capacity (F40)	$ 40
8" 90 disk capacity (F90)	$ 55
5" 40 disk capacity (M35)	$ 30
5" 90 disk capacity (M85)	$ 45

Diskettes:

Nashua		Verbatim Datalife	
5" ss/sd	$ 40	5" ss/sd	$ 34
5" ds/dd	$ 50	5" ds/dd	$ 47
8" ss/sd	$ 50	8" ss/sd	$ 38
8" ds/dd	$ 60	8" ds/dd	$ 52

Printers:	
BMC Printer (MX-80 lookalike)	$330
Second hand Centronics 15" printers	$250
Printer Ribbons:	
C.ITOH 8510	$ 9
IBM Selectric II (Orange leader)	$ 3
IDS	$ 15
MX-80	$ 10
MX-100	$ 15
Okidata Microline 84	$ 6
Other ribbons available on special order	$POA
'Almost Standard' 9.5"x11" paper	$ 26
Assorted scrap 9" & 15" paper (approx.)	$ 20
15" Plastic Computer listing binders	$ 3
9" Plastic Computer listing binders	$ 3
Empty 8" plastic library boxes	$ 7
Empty 5" diskette boxes (Verbatim-style)	$ 3
3M (Scotch) data cartridges	$POA
MICOM T-shirts (CBBS cartoon)	$ 7
MICOM Windcheaters (MICOM logo available)	$ 13

The following items will be discontinued once current stocks are exhausted:

Twinlock Fastfit suspension filing frames	$ 3
Twinlock Crystalfile suspension folders	70 cents

Haig Jason 288 5648 9am - 9pm

Places to take your current MICOM membership card to for discounts:

ABACUS COMPUTER STORE, 512 Bridge Rd. Richmond - 5%-10% selected items
CHALLENGE, Shop 16B Westfield Shopping town Doncaster Rd.- tell 'em we sent you
COMPAK COMPUTER CENTRE, 350 South Rd. Moorabbin - tell 'em we sent you.
COMP-SOFT, 235 Swan St. Richmond - tell 'em we sent you
COMPUTERLAND, 123 Lonsdale St. Melbourne - 7.5% on most goods
CONTEMPORARY SOUND CENTRE, 87-89 Riversdale Rd. Hawthorn - 10% all goods
DEFOREST SOFTWARE, 26 Station St. Nunawading - 10% on software
ENTERCOM COMPUTER CO., - 136 Bridge Rd. Richmond - tell 'em we sent you.
FUTURE BUSINESS SYSTEMS,6/105 Hawthorn Rd. Nth Caulfield - tell 'em we sent you
GSE COMPUTERS, 47 Huntingdale Rd. Burwood - 10% on all items
GERARDI PHOTOGRAPHICS, 167 Elgin St. Carlton - 10% on all goods
HARDERS EDUCATION AND COMPUTER CONSULTANCY SERVICES - 941 Heatherton Rd. Springvale - tell 'em we sent you.
MIND GAMES 275 Glenferrie Rd. Malvern, 591 Chapel St. Sth Yarra, and 200 Bourke St. Melbourne 10% on all lines
PANATRONICS, 691 Whitehorse Rd. Mont Albert - 10% on selected items
THE COMPUTER FACTORY - 136 Bridge Rd. Richmond - tell 'em we sent you.
THE COMPUTER SHOP, Kingsway & Albert Rd. Sth. Melb - tell 'em we sent you
THE LOGIC SHOP, 212 High St. Windsor - tell 'em we sent you.
Also at the BURWOOD KMART SHOPPING CENTRE cnr Burwood Hwy & Blackburn Rd

Pesterable MICOM people (during decent hours only)

Marcus Wigan	(President)	277 6003
Geoff Halprin	(Vice President)	859 9871
Andrew Stewart	(Secretary)	428 1290
Fulvio Gerardi	(Treasurer)	288 4712
Robert Green	(Publications)	818 6343
David Green	(Promotions)	241 6673
Stephen Thomas	(Membership)	836 7364
Haig Jason	(Purchasing)	288 5648
Dav-id Furst	(CPMUG chairman)	BH 267 6800
Branko Colavizza	(PUG chairman)	434 2541
Nigel Leith	(MAGE chairman)	878 3154
Geoff Kidd	(VBBG chairman)	BH 433 2364
David Broadbent	(Otrona chairman)	

Mon	Tues	Wed	Thur	Fri	Sat	Sun	
16 MICOM COMMITTEE	17	18	19	20	21 MICOM	22	CBBS 762 5088
23	24 CPMUG	25 ESEUG	26	27	28	29 10AM MICOM CAR RALLYE	
30	1	2 VBBG TEACH-80	3	4 PUG FORTH	5 AVSOM	6 SCUA	NEWSLETTER DEADLINE THIS WEEKEND ←
7	8 PENINSULA	9 COMPUCOLOR	10	11	12	13	
16 MICOM COMMITTEE	15	16	17	18	19 MICOM	20	

MICOM
THE MICROCOMPUTER CLUB OF MELBOURNE
P.O. Box 90, Canterbury 3126
Project Planning Sheet
YEAR: 1984
MONTH: APR/MAY

MICOM

THE MICROCOMPUTER CLUB OF MELBOURNE
P.O. Box 60 Canterbury 3126

Name: _____

Address: _____

City: _____ P/Code: _____

Phone: Home: _____ Bus: _____

Processor/System: _____

Signature: _____ Date: ___/___/_____

SPECIAL INTEREST GROUPS: _____

SPECIAL QUALIFICATIONS: _____

_____

Membership Application Forms
Annual fee $10.00

Please forward to:
MICOM, P.O. Box 60, Canterbury

MICOM

THE MICROCOMPUTER CLUB OF MELBOURNE
P.O. Box 60 Canterbury 3126

Name: _____

Address: _____

City: _____ P/Code: _____

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Signature: _____ Date: ___/___/_____

SPECIAL INTEREST GROUPS: _____

SPECIAL QUALIFICATIONS: _____

_____

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